## **EXHIBIT F**

ALLOCATION PRINCIPLES AND METHODOLOGY

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#### I. OVERVIEW

This memorandum describes the methodology for calculating Actuarial Contributions ("ACs") pursuant to Article VII of the Plan of Reorganization ("Plan"). There is a separate section describing the methodology and assumptions for each of the following product lines:

- 1) Individual Life Insurance Policies in the Closed Block
- 2) Individual Life Insurance Policies Not in the Closed Block
- 3) Individual Annuities
- 4) Individual Health Policies
- 5) Group Annuity Contracts
- 6) Group and Creditor Life and Health Insurance Policies

The general methodology is described in more detail below. Aspects specific to a particular product line are included in the section for that product line.

Capitalized terms used in this Exhibit have the meanings ascribed to them in the Plan or in this Exhibit. For purposes of this Exhibit only, references to Pruco include the United States operations of both Pruco Life Insurance Company and Pruco Life Insurance Company of New Jersey.

## II. BASIC PRINCIPLES AND METHODOLOGY

#### A. Introduction

Actuarial Contributions (ACs) are used in the calculation of the Basic Variable Component of consideration as described in Section 7.2 of the Plan.

The AC of a particular policy is the accumulated contribution that policy is estimated to have made in the past to the Company's surplus ("historical contribution") plus the present value of the contribution that the same policy is expected to make in the future ("prospective contribution"), with values as of March 31, 2000, which is the Actuarial Contribution Date, or "AC Date." The historical contribution period is assumed to end at the AC Date, and the prospective contribution period is assumed to begin at the AC Date, except as noted for divested business.

Conceptually, each year's contribution to surplus equals the excess of premiums, investment income, and capital gains over benefits, dividends, commissions, expenses, and taxes.

#### **B.** Basic Methods

The Company used either a "modeling" approach or a case-by-case approach, as appropriate, for purposes of determining the ACs.

Under the modeling approach, representative plans, issue years, and, in some situations, issue ages, gender and / or underwriting classes were selected to develop historical and prospective contributions to surplus. Each of the plan / issue year / issue age / gender / underwriting combinations is called a model "cell." For each model cell, year-by-year estimated historical contributions to surplus were accumulated with interest to the AC Date. Similarly, future expected annual contributions to surplus were discounted with interest to that same date. The sum of the historical and prospective contributions to surplus at the AC Date gives the total contribution to surplus for that model cell. The ACs for the model cells were then smoothed using statistical techniques, where appropriate, and were then used to develop ACs for all inforce policies.

Under the case-by-case approach, the year-by-year history of each policy in a product line was taken into account, so that a specific contribution-to-surplus calculation was done for each case. As under the modeling approach, historical contributions to surplus were accumulated with interest, and prospective contributions to surplus were discounted with interest to the AC Date.

For purposes of the AC calculations, product lines were established by following the annual statement lines of business, and then creating subdivisions as needed to deal with product groups that differ from each other significantly in terms of product characteristics. In defining product groups for purposes of AC calculations, the Company's past practices in managing the business were followed to the greatest extent practicable.

The information required for all of these calculations comes from a variety of proprietary files and reports including policy records maintained in electronic media, internal analyses and memoranda and also from public documents such as annual statements. These data sources are referenced where appropriate.

Policy level data and aggregate data were used where available and credible. To the extent that data were not available or were not credible for certain periods of time, reasonable approximations were made to fill in the missing data.

## C. Total Actuarial Contribution at the Policy Level

#### 1. Financial Management Unit

A "financial management unit" is the group of all coverages issued to a single policyholder that have been managed together from a financial point of view (i.e., for rate-setting, experience-rating, dividend-setting, etc.). Usually, each policy constitutes one financial management unit, but sometimes a single policy may contain more than one financial management unit and sometimes two or more policies may constitute one or more financial management units. Each determination of an AC for a financial management unit included two elements - historical contribution and prospective contribution. These two elements were always added algebraically (i.e., a negative amount served to offset a positive amount) to determine the AC of the financial management unit.

## 2. ACs at the Policy Level

- a. When a policy constitutes one financial management unit, the AC for the policy is the AC for the financial management unit, but not less than zero.
- b. When a policy contains more than one financial management unit, the AC for the policy is the sum of the ACs for each of its financial management units, after first setting any negative AC for any of the financial management units to zero.
- c. When two or more policies constitute one or more financial management units, the total AC for all of the policies is the sum of the ACs for all of the financial management units, after first setting any negative AC for any of the financial management units to zero. The sum so determined is allocated among the policies in such a way that no policy has a negative AC. The amount so allocated to each policy is the AC for the policy.

#### D. Assumptions and Practices that Apply Across Lines of Business

The following assumptions and practices apply to all lines of business unless noted otherwise here or in the section for that line of business.

In general, the historical experience factors for taxes, investment returns (investment income and capital gains or losses), and expenses were developed based on the results as allocated in the annual statement. The data sources included annual statement data and certain other sources developed for internal reporting. The data from such other sources were adjusted as needed to tie to the annual statement amounts. However, there were specific "corporate events" that were not allocated to any specific class of policies and were not reflected in the financial management of the business. To the extent that these "corporate events" (such as preparation for Y2K and sales practices remediation and expenses) could be identified and their financial impact quantified, the taxes, investment returns or expenses were adjusted to remove the impact of these "corporate events."

The prospective expense and investment income assumptions reflected recent experience. The prospective tax assumptions were based on the current corporate tax rate and reflected the fact that after demutualization, Prudential, as a stock company, will no longer be subject to the equity tax that is charged to mutual companies.

## 1. Historical Rates of Investment Return and Accumulation Rates

The interest rates used in the historical AC calculations were derived from the assets and investment income and capital gains allocated to each line of business. The rates were developed consistent with the Company's management practices with regard to investment income allocation during the historical period, and are net of defaults and investment expense.

Prior to 1962, the Company used a single portfolio rate for allocating investment income to annual statement lines of business. Overall Company rates for investment income and capital gains were developed from annual statement totals for use by all lines in those years.

In 1962-1984, the Company used an investment year method for allocating investment income and capital gains to annual statement lines of business. Rates were developed from annual statement totals by line for use by the respective lines in those years.

In 1985 and later, the Company used asset segmentation for allocation of investment income and capital gains to the annual statement lines of business. Rates were developed from totals by segment in those years.

Realized capital gains (and losses) were adjusted to reflect capital gains taxes. These amounts were added to unrealized capital gains (and losses) on invested assets held at market value in the annual statement. Consistent with the Company's financial management practices, the recognition of capital gains and losses was spread, generally over five years.

The financial impact of investments in operating subsidiaries was also removed, to the extent that data was available to allow for such removal, since the returns on such investments historically have not been reflected in the financial management of the lines of business that are eligible for consideration. The financial impact of policy loans was removed since policy loan assets were handled separately in the individual life insurance models.

The rates used to accumulate the historical ACs to the AC Date were set equal to the after-tax historical investment income rates, including the effect of capital gains as explained above, for each product group.

## 2. Prospective Rates of Investment Return and Discount Rates

For business in the Closed Block, assumed investment income rates for prospective ACs were based on assumptions consistent with the assumptions used in determining the funding of the Closed Block.

For business not in the Closed Block, assumed investment income rates for prospective ACs were graded from the 1999 historical investment income assumption to an ultimate rate. Separate ultimate rates were defined for groupings of business; such groupings were defined consistent with the asset segmentation used by the Company. For each grouping, the ultimate rate was developed by starting with the Treasury yield curve as of March 31, 2000, and adding a spread over the Treasury rates based on the mix of assets, the quality of assets, and the maturity term of assets purchased for each grouping. The mix, quality, and maturity term for each grouping was determined based on the 1999 Asset Adequacy Testing performed by the Company. The period of years used to grade from the 1999 rate to the ultimate rate was based on the maturity term of assets assumed purchased for each product group. No future capital gains were assumed in developing these prospective investment income assumptions, although the five-year spreading of historical capital gains did carry over to the initial part of the prospective period.

The rates used to discount the prospective ACs to the AC Date were set equal to the after-tax investment income rates used in the prospective AC calculations.

#### 3. Historical Expense Factors

Unit historical expense assumptions were developed by starting with statutory line of business information (general insurance expenses, miscellaneous taxes, licenses, and fees expenses, and additional payments for benefit plan expenses) as reported in the Company's annual statements. These expenses were then adjusted to remove expenses that were reported in the statutory financials for the lines of business, but which had not been reflected in the financial management practices of the lines. Such adjustments included the removal of unallocated corporate overhead expenses (e.g., demutualization-related and Y2K-related expenses) and certain administrative and legal expenses associated with various, one-time events. These adjustments were made where information was available (generally back to the early 1990s for most of the adjustments, but back to 1980 for other adjustments).

Once the adjusted annual statement expenses were developed, they were allocated to various products within each line of business based on historical practices and available information. Unit expense assumptions were developed from these allocated expenses for use in developing historical ACs.

## 4. Prospective Expense Factors

Expense assumptions used in calculating prospective ACs were based on recent experience. Specifically, the ultimate prospective unit expense assumptions used in the 2002 and later years were set equal to an average of the unit expense assumptions over the period 1995 - 1999. The unit expense assumptions grade linearly from the 1999 assumption to the 2002 assumption.

## 5. Historical Federal Income Tax Factors

The applicable US tax law is complex and has changed over time. The derivation of tax factors followed both the dynamics of the law in each time period and also the Company's approach for allocating taxes. Results were tied to actual taxes incurred as reported in the annual statement.

The Company's historical practice has been to treat the Group Annuity business separately from all other lines of business in the allocation of taxes. This separate treatment was meant to reflect the actual operation of the Group Annuity line of business and the fact that the line consisted primarily of tax—qualified business, which received different tax treatment from most of the other lines in some tax eras.

Broadly, there were three major tax eras used in the historical period for lines other than Group Annuity. Rates were developed consistent with applicable laws in those periods, to be applied to corresponding bases for the historical AC calculation.

For 1957 and prior years, Company-wide tax rates were developed as a function of investment income, which were identical for all lines of business, including Group Annuities.

For 1958-1981, marginal tax rates were developed as functions of assets, investment income, interest paid credits, and reserves, and applied to corresponding bases. The marginal tax rates on reserves varied by valuation interest rate and tax qualification status and were adjusted year-by-year to reproduce total company tax (excluding group annuity and Canadian business) for each year. This reconciliation was done before reflecting Modco savings in 1980-1981. ("Modco savings" refers to the financial effects of certain reinsurance arrangements and tax recognition thereof that the Company had elected under the former Section 820 of the Internal Revenue Code.) Such savings associated with the individual life lines of business were allocated in proportion to dividends, since the existence of the Modco reinsurance served to reduce the limitation on the deductibility of dividends.

After 1981, the tax was calculated by adjusting each year's statutory gain to a tax basis (primarily by substituting reserves and dividend liability defined by the prevailing tax law for statutory reserves and dividend liability), and then applying the appropriate tax rate. In 1984 the "fresh start" reserve adjustment was reflected and the new equity tax began to be reflected. The DAC proxy tax (which began in 1990) was reflected in the calculations as described below. Finally, the resulting total tax for the years 1982-1999 was adjusted to tie to the total tax, for Prudential and Pruco combined, in the annual statements for those years.

Even though the same tax laws as described above applied to all lines of business, their effects on Group Annuity (which consisted mainly of tax-qualified business), in combination with the information available on Group Annuity cases, led to somewhat different approaches to reflecting taxes for these cases. Based on the financial management of the Group Annuity business, historical taxes through 1979 had already been allocated to each case.

However, tax formulas related to investment return were needed in order to apply them to the rates used to accumulate historical ACs. For years 1958-1961, Company-specific tax rates were developed as functions of assets, and applied to corresponding Group Annuity assets. For 1962-1979, tax rates specific to the Group Annuity line were developed as a function of assets, and applied to corresponding Group Annuity assets.

For 1980 and later years, the historical tax calculation for Group Annuity ACs was based on US corporate tax rates applicable to taxable income. The equity tax for mutual companies (which began in 1984) was reflected. The resulting total tax for the years 1980-1999 was adjusted to reproduce the total tax in the annual statement in the Group Annuity line for those years (including Modco savings in 1980-1981).

## <u>6. Prospective Federal Income Tax Factors</u>

For the prospective AC calculations, the current corporate tax rate was applied to taxable income for the line of business, after reflecting the difference between statutory and tax basis liabilities. No equity tax was applied since the equity tax does not apply to stock companies.

## 7. DAC Proxy Tax

For the individual annuity business, the individual health business, and the group life and health business, the present value cost of the DAC proxy tax (which began in 1990) associated with each premium payment was charged at the time each premium payment was assumed to be received. For the individual life business, an equivalent calculation was performed: the actual capitalization and amortization of the DAC proxy tax associated with each premium was reflected in the AC calculations, except that the present value of any unamortized amount remaining at the end of the historical period was credited to the historical AC. The DAC proxy tax does not apply to Group Annuity business.

#### E. Calculation Rules that Apply Across Lines of Business

#### 1. Number of Prospective Years Recognized in the AC Calculation

For the individual lines of business, the prospective AC calculation ran through the end of the mortality or morbidity table or maturity or expiry of the modeled policy. For group business, the prospective AC calculation generally ran for 20 years from the AC Date. However, in certain cases, different periods were used, based on the nature of a particular group product line.

## 2. Policies Whose Contribution to Surplus Is Taken Into Account

As a general rule, contribution to surplus was determined only for policies and contracts that were in force as of the Eligibility Date. However, in some cases, the contribution to surplus for such policies included part of the financial experience of prior policies which they replaced. In such cases, the experience of the prior policy was considered to be part of the experience of the current policy. The financial management practices within each line of business were examined to determine when a current policy should be deemed to be a continuation of a prior policy for purposes of determining actuarial contributions. Based on this examination, the AC calculations reflected the following:

a. Individual life insurance, annuities, and health insurance. The Company followed the general rule stated above, that contribution to surplus was determined only for policies and contracts that are in force as of the Eligibility Date, with respect to individual life, health and annuity business. There was one exception to this general rule:

Beginning in August, 1997, the Company began an exchange program which was designed to retain customers who had annuity contracts that had reached the end of their surrender charge periods by offering a new, more modern contract. This new exchanged contract was available only to those customers eligible to participate in the exchange program. Because the exchanged contract was directly tied to the existence of the prior annuity contract, the contributions to surplus of the original contract were reflected in the AC of the contract received in the exchange.

Note that payout annuities resulting from the annuitization of a retirement annuity contract or a deferred annuity contract are, by the terms of the contract, a continuation of the original annuity. Accordingly, the AC calculations for such annuitized annuity contracts reflected contributions to surplus during both the deferred period and the payout period.

- b. Group Annuities. The Company identified several types of situations in which a contract currently in force should be viewed as having been issued in continuation of a previous contract. These involved situations in which the Company, in agreement with its customers, issued replacement contracts while carrying forward the appropriate elements of financial experience from the prior contract.
- c. Group Life And Health Insurance. The Company has identified a number of circumstances that may be viewed as "contract modernizations," in which the Company and a customer agreed to issue a new contract (or, sometimes, to assign a new contract number to an amended existing contract) and the financial experience of one or more financial management units of the prior contract was carried forward to one or more financial management units of the successor contract.
- d. Group Annuities and Group Life and Health Insurance. In addition to the situations cited above for these lines of business, it was necessary to take into account changes in coverage arising from business transactions of the customer (e.g., mergers and spin-offs). The

principles discussed above were applied in such situations; that is, a continuation of the prior contract was assumed if the prior experience was carried forward in the financial management of that contract. The Company also assessed the specific case structure for each group policyholder to ensure that consistent treatment of contract continuity applied across all groups, consistent with the financial management practices of the Company.

## 3. Reinsurance

For blocks of business with "company-directed" reinsurance (other than in connection with divestitures, which are discussed below) any gain or loss from reinsurance was generally not credited or charged to the specific policies on which reinsurance coverage exists. However, as mentioned above, the tax savings in 1980-81 for certain Modco reinsurance transactions were reflected in the ACs for the policies affected by the reinsurance. In situations where a client directed the Company to cede some of the risk on the client's business ("client directed"), the gain or loss from such reinsurance was reflected in the AC calculations, either directly, or indirectly, if already reflected in dividends.

#### 4. Divestitures

In cases where the Company has divested itself of certain businesses, (i.e., the transferred Canadian business sold in 1996, the US healthcare business sold in 1999, and the individual disability income business sold in 1999), the "gain on sale" from each such divestiture was used as the total "prospective contribution to surplus" for each such block of business. The gain on sale was allocated among policies in force at the date of the sale of the divested block based on a proportional allocation of theoretical prospective ACs that were calculated for each policy in force as of the date of sale. The date of the sale of each divested block was used as the end of the historical period and the beginning of the prospective period. The allocated ACs were accumulated with interest from the date of sale to the AC Date.

## 5. Assumptions for Canadian Branch Business

The discussion of assumptions in II.D. was for US business. For Canadian branch policies, Canadian branch assumptions were used where credible data were available. One main source for Canadian data was the separate statutory branch financial statements. These reports were available beginning in 1970. Separate financial records of the Canadian branch were not available for years prior to 1970. In addition, many of the Company's Canadian branch records were provided to London Life at the time the business was sold or were otherwise no longer available. If credible data were not available, US data or combined US and Canadian data were used in developing assumptions for the Canadian branch business.

a. Investment Return and Accumulation Rates were calculated in the same manner as the US rates for all Canadian branch business through 1995 and for the retained Canadian business in all years. For the transferred Canadian branch business, the 1995 rates were held constant in 1996 and later.

- b. Total line of business expenses for each line of the Canadian branch were used for the development of unit cost factors for the period 1970 to 1995 under the same process as was used for the development of US factors. Prior to 1970, combined US and Canadian experience was used. After 1995, combined US and Canadian experience was used for the retained business because of the sale of most of the branch business and the consolidation of management of the US business and the retained Canadian business. For 1996 and later, 1995 unit factors were used for the transferred business.
- c. The Canadian branch was taxed the same as the US operation through 1975. In 1976 the Company elected, under the Internal Revenue Code, to treat the Canadian branch as a separate Canadian company for tax purposes. Model Canadian tax rates were developed from actual taxes paid each year and were allocated half to surplus and half to investment income. This approach was used for the retained business through 1999; thereafter, US tax rates were used, since the US rates were thought to represent a best estimate. The same approach was used for the transferred business, up through 1995. To the extent that data were available to develop actuarial contributions on a Canadian basis, the 1995 Canadian tax rates were applied to all years after 1995. Where such data were not available, the gain factors and assumptions were US based, so US tax rates were used for consistency.

#### 6. Canadian Currency Conversion

Actuarial contribution calculations for Canadian-denominated business were done in Canadian currency; the values were converted to US currency using the exchange rate on the AC Date between United States dollars and Canadian dollars published in the final Eastern edition of The Wall Street Journal on the business day next following the AC Date.

## 7. New Issues and Reinstatements After the AC Date

ACs for policies issued or reinstated after the AC Date and prior to the Adoption Date were developed in a manner consistent with that used for business in force on the AC Date.

## 8. Treatment of ADR Claimants in Actuarial Contribution Calculations

In its "Important Notice to ADR Claimants" dated April 14, 1998, the Company described certain commitments to these claimants that would be applicable if the Company ultimately demutualized. Accordingly, there was no charge against the contribution to surplus in the AC calculations for Eligible Policies of these claimants for any claim payments that have been made or will be made with respect to a settlement on an individual life insurance policy or for the associated costs (administrative expenses, legal expenses, etc.). This is consistent with the way the Company has managed dividends and interest crediting rates throughout the sales practices remediation program. A description of the AC calculations for ADR Claimants is included in Exhibit E, the ADR Memorandum.

# III. INDIVIDUAL LIFE INSURANCE – POLICIES IN THE CLOSED BLOCK

## A. Overview and Methodology

The Closed Block includes regular ordinary business which pays experience-based dividends, industrial (weekly premium) life policies, and intermediate life policies. The methodology described for this business also applies to the weekly premium and intermediate business remaining in the Company's Canadian branch, for which the Company has established a closed block separate from the U.S. Closed Block.

Industrial business was issued from 1875 – 1967. Intermediate business was issued from 1928 – 1962. The Closed Block regular ordinary business, which includes a variety of whole life plans, modified premium plans, endowment plans, paid-up coverages, and dividend-paying term insurance plans, has been issued since 1886. The Canadian weekly premium business was issued from 1909 – 1967 and the Canadian intermediate business was issued from 1928 – 1962.

The individual life lines of business comprise over 14 million policies. As a result, ACs for this business were developed by calculating historical and prospective ACs for model cells (as described in Section II.B.). Some model cells represent base policies, others represent dividend credits that would have been purchased over time by dividends (paid-up additions and dividend accumulations). The sum of the historical and prospective contributions to surplus at the AC Date gives the total contribution to surplus for the model cell. The ACs for the model cells were then smoothed using statistical techniques and were then used to develop ACs for all inforce policies.

Base policies, those term riders which could have been issued as stand-alone policies (and have the same ACs as the corresponding stand-alone policies), and dividend credits are considered by the Company to be distinct "financial management units." ACs from gains on supplementary benefits such as waiver of premium and accidental death benefit are not determined separately for policies with such supplementary benefits. Instead, these gains, referred to as "miscellaneous gains," are used to reduce expenses used in developing unit expense assumptions for all policies. This approach is consistent with the Company's financial management practices.

For each model cell, historical ACs were calculated year by year from the assumed date of issue of the policy and accumulated with after tax interest to the AC Date. Each year's historical AC took into account policy factors such as premiums, dividends, tax reserves, and experience factors such as investment income, capital gains, mortality, commissions, expenses, miscellaneous gains, and taxes, including Federal income taxes. (Since these historical calculations were done for a policy that was assumed to be currently in force, there was no need to recognize surrender benefits.) For each year, historical experience factors reflected the pooled experience of similar policies.

A process similar to that used for historical ACs was used to calculate expected prospective ACs—i.e., the calculations use assumptions for future premiums, investment income, expenses, dividends, benefits, etc. In addition, future surrender benefits were taken into account. Each future year's expected AC was discounted with after-tax interest to the AC Date. Then, the historical and prospective ACs for each model cell were added to obtain a total Actuarial Contribution.

The next step was to calculate ACs for all policies based on the ACs calculated for the model cells. This process involved three components:

- 1. Subdividing all individual life policies into logical groupings based on issue year eras, issue age groupings and product series. These groupings were consistent with the financial management of the business. Policies were also segmented between premium-paying and paid-up business for permanent ordinary business, and by product type for term business;
- 2. Reviewing the AC results for the model cells in each logical grouping and, by using statistical techniques, developing a set of relatively simple factors to be applied to one or more policy parameters (such as cash value or face amount or per policy). The factors selected closely reproduced the relative profitability of the cells in the group.
- 3. Applying an appropriate factor to each corresponding policy parameter in force.

Factors were derived so that the aggregate ACs for the model cells in each logical grouping (and, hence, for the entire individual life business) did not change as a result of the development of the simplified set of factors. The use of the statistical techniques discussed above resulted in the smoothing of AC results within each logical grouping consistent with the financial management practices of the Company over time.

#### **B.** Historical Calculations

The following paragraphs describe the policy factors and experience assumptions used in the historical AC calculations in more detail.

#### 1. Gross Premiums

Annual premiums and policy constants were each adjusted by multiplying by average modal loading factors. (Policy constants are premium elements that are charged on a per-policy basis. Modal loading factors are used to convert annual premiums into monthly, quarterly or semi-annual premiums.) The adjusted policy constant was then divided by the average size policy in the model cell, added to the adjusted annual premium and the result modeled as the premium payable annually in the middle of a calendar year. The loss of interest on premiums payable other than annually was modeled as an additional percentage of premium expense.

#### 2. Death Claims

Based on Company mortality studies, the mortality experience over time was related to the prevailing industry select and ultimate mortality table (or valuation mortality in the case of intermediate and weekly premium policies). The appropriate mortality rate from these tables was used to calculate a cost of insurance charge for the net amount at risk for each year. Consistent with the Company's financial management practice, the experience of Pruco was combined with the experience of Prudential in this analysis.

#### 3. Commissions

Historical average commission scales (reflecting the various commissions paid in each of the Company's sales distribution channels) were used for each model cell. These scales were adjusted to reflect agent termination rates, the vesting provisions in the agents' contracts and the Company's policy of transferring service and collection commissions on policies written by agents who were no longer active.

## 4. Expenses and Taxes (Other Than Federal Income Tax)

#### a. Regular Ordinary

For each year in the historical AC calculation, model expenses were developed based on the most recently preceding Company unit expense study and units in force. The amount of expenses covered by those assumptions was then compared to the actual historical expenses of the line reduced by estimated miscellaneous gains from supplementary benefits such as premium waiver and accidental death benefits, from dividend accumulations, from extended term insurance, and from expense adjustments as described in Section II.D.3. Any excess of net actual expenses over modeled expenses was then modeled in that year as an expense expressed as a percentage of reserve. For years with an excess of modeled expense over net actual expense, all expense factors were scaled down to match net actual expense levels. Consistent with the Company's financial management practice, the experience of Pruco was combined with the experience of Prudential in this analysis.

#### b. Weekly Premium

Expenses for weekly premium policies were developed in a similar manner to regular ordinary policies except that all expenses were expressed per policy rather than using the more complex structure of the expense studies for the regular ordinary line.

#### c. Intermediate

Where expenses for intermediate policies were available from Company records the same procedure was followed as for weekly premium policies. For years where data was not available, the level of expenses for intermediate policies was estimated from the data for weekly premium policies because of the similarities between these two blocks of business.

#### 5. Dividends

The actual dividends per unit payable in a calendar year were used for each model cell. Some of the very early duration historical termination dividends were approximated if the actual scale was not available.

## 6. Net Investment Income Earnings Rates and Capital Gains Rates

Net investment income earnings rates and capital gains rates were developed consistently with the general approach described in Section II.D. Where separate data for intermediate and regular ordinary were not available the combined experience was used for both.

#### 7. Federal Income Tax Rates

Federal income tax rates were developed consistently with the general approach described in Section II.D. The treatment of the DAC proxy tax was also handled consistently with the general approach described in Section II.D.

In the calculation of the DAC proxy tax for base policies, it was assumed that a certain percentage of base policy dividends was used to reduce premiums (consistent with actual company experience). The AC calculations for paid up additions cells used dividends from the base policy and existing PUA amounts as premiums. However, no DAC proxy tax is created by dividends used to purchase Paid Up Additions.

#### 8. Other Liabilities

Claims were modeled as paid when incurred and then adjusted for interest gains resulting from delayed payment of claims.

## C. Prospective Calculations

The same types of experience factors as listed above were used for prospective AC calculations. All prospective assumptions were based on recent experience.

In addition, assumptions for future policy terminations were needed. Consistent with the Company's financial management practice, the combined recent experience of Prudential and Pruco was used in setting the future policy termination assumption.

In general, the experience factors used to calculate prospective ACs were consistent with those used to determine Closed Block funding. For example, the prospective earned rate assumption was based on the projected earnings rates of the Closed Block assets. The discount rate used in calculating present values was based on the after-tax projected earnings rate. There are four exceptions to this general rule:

- 1. The Closed Block funding calculation reflects the fact that the Closed Block will not be charged for actual renewal commissions, administrative and overhead expenses, and investment expenses. Instead, a fixed schedule of charges will be used in lieu of these actual expenses. Unit expense assumptions for the prospective AC calculations were developed consistently with the general approach described in Section II.D. Commission assumptions were consistent with the scales used for the historical AC calculations.
- 2. The Closed Block will be charged for certain taxes (e.g., Federal income tax) using the specific rules described in the Closed Block Memorandum. Federal income tax rates for the prospective AC calculations were developed consistently with the general approach described in Section II.D.
- 3. No capital gains were projected in the Closed Block funding. However, the runoff of unamortized historical capital gains was recognized in the prospective AC calculations.
- 4. The AC calculations recognized the amortization of the build-up of DAC proxy tax at the end of the historical period while the calculations for Closed Block funding started with the beginning DAC proxy tax balance of the Closed Block policies and amortized it prospectively.

# IV. INDIVIDUAL LIFE INSURANCE – POLICIES NOT IN THE CLOSED BLOCK

This category included four types of U.S. business: indeterminate premium term insurance (issued from 1988 to 1996), guaranteed premium term insurance (first issued in 1996), interest-sensitive life insurance (first issued in 1984) and variable life insurance policies (first issued in 1983). Over time, variable and interest-sensitive life insurance policies have been issued by both the Company and Designated Subsidiaries.

The term products have been issued on a nominally participating basis, but no dividends have been paid and none are expected in the future. Because of similarities between the indeterminate premium term business and other term business in the Closed Block, these indeterminate premium term policies were mapped to the comparable Closed Block model cells. The AC methodology and assumption development for the guaranteed premium term insurance paralleled that for the Closed Block policies in all material respects.

Because of similarities between the interest-sensitive life products and variable life products, and because the Company has historically managed these products together, the interest-sensitive life products were mapped to the comparable variable life model cells. The AC methodology and assumption development for the variable life products paralleled that for the Closed Block policies in all material respects, except as noted below.

- 1. The AC factors for variable life insurance were expressed as a function of policy fund value, face amount, and per policy.
- 2. The following additional assumptions were used in developing the historical ACs. These assumptions were based on pricing assumptions, adjusted to reflect actual experience, where available.

#### a. Premium Pattern

Many of these products are flexible premium products. Historical premium patterns were reviewed and historical premium ratios were determined for each modeled flexible premium product. The premium ratios were developed as a function of the original expected premium level for each product, and were also validated by making sure they reproduced fund values at the product level as of the AC Date.

## b. Spreads

Based on the product pricing spreads associated with general account business, separate account business, and policy loans, weighted average spreads were developed for modeled products based on the historical distribution of funds among the general account, separate account, and policy loans.

For calculation purposes, weighted average earned rates were developed by adding weighted average credited rates (based on the same distribution of funds used in developing the weighted average spreads) to the weighted average spreads.

For the fixed premium variable policies, the earned / credited rates were validated by reproducing the aggregate fund levels as of the AC Date.

- 3. Consistent with the Company's historical practices in setting general account credited rates, the rates used to accumulate the historical ACs to the AC Date were based only on Pruco experience.
- 4. Prospective assumptions were based on pricing assumptions and recent historical experience. Prospective earned rates were developed consistent with the approach described in Section II.D. above (except that the general account earned rates were based on the recent experience of Pruco only, to be consistent with Prudential's historical financial management practices).

For the Canadian branch policies, comparable methods to those described above were used, except that prospective ACs were adjusted consistent with the treatment described for divested business in Section II.E.4. Assumptions used in the AC calculations were developed based on Canadian data (where credible Canadian experience data were available). Where credible Canadian experience data did not exist, the Company's US or combined US and Canadian experience was used. As an example, US prospective ACs were used as the theoretical Canadian prospective ACs for the purpose of allocating the gain on sale on the business transferred to London Life.

#### V. INDIVIDUAL HEALTH POLICIES

## A. Overview and Methodology

The Individual Health business includes products issued by the Company beginning in 1952. This line of business was intended to complement individual life insurance sales. Initially, the products offered included individual disability income insurance, hospital/surgical policies, hospital indemnity policies, and accidental death and dismemberment (AD&D) policies. The Company introduced Medicare Supplement policies starting in the late 1970s as conversions from group policies. In the early 1970s, the Company introduced CHIP, a leading edge comprehensive medical insurance program. This product was replaced by PruMed in 1983. The Company's individual health business also includes individual policies sold as conversions from group insurance policies. The Company ceased its sales of individual health business in 1993. However, it introduced an individual Long Term Care (ILTC) policy starting in 1999, which is the only Individual Health product currently being sold. All of this business is participating, though dividends are not currently paid on most of this business.

The Individual Health business was subdivided into eleven different categories of business, each representing a similar group of policy forms whose historical financial management practices were comparable to each other. These categories parallel the types of products sold, as defined above. AC factors were computed by issue year within each category, and the resulting factors were applied to annualized premiums for each policy within the category.

The Actuarial Contribution methodology for Individual Health business was similar to that for Traditional Life. The following material modifications were used for Individual Health business:

- 1. The AC factors were expressed per dollar of current annualized premium on each policy.
- 2. AC factors varied by calendar year of issue and category of business (and by plan for individual disability insurance).
- 3. For the individual DI business sold in 1999, the prospective ACs were adjusted consistent with the treatment described for divested business in Section II.E.4.

Annual AC factors were produced for every calendar year for every issue year within every category of business. The historical AC factors were accumulated with interest to the AC Date, and the prospective AC factors were discounted to the AC Date. After applying AC factors to the current annualized premium on each policy, the historical AC and prospective AC were added to produce the total AC for each policy, which, in no event, was allowed to be less than zero.

AC factors were computed based on "unitized premiums." That is, all the assumptions were developed as percentages of premium. Calculations were based on a unit (\$100) of premium in calendar year 2000. Historic premium levels were adjusted to reflect past rate increases, and

future premiums were adjusted to reflect anticipated future rate increases, policy lapses and expirations.

#### **B.** Historical Calculations

The following assumptions were used in the historical AC calculations.

#### 1. Loss ratios

Historical statutory loss ratios (paid claims plus change in claim reserves as a percentage of earned premium) were developed by calendar year for each category of business. Estimates were used for earlier years where such detail did not exist, using annual statement loss ratios by renewability feature as the guide.

## 2. Expenses, commissions, premium taxes

These values were expressed as a percentage of each year's premium, based on allocations to the Individual Health line of business. Relationships between first year and renewal year commissions and expenses were based on actuarial memoranda for representative policy forms. In recent years, the expense allocations to the Individual Health line of business were negative; these negative values were determined to be not credible and were not used. Instead, the most recent credible data were used.

#### 3. Rate increases

Historical rate increases were recognized to reflect the changes in rates that have been charged over a policy's lifetime. An inventory of such historical rate increases was developed from the Company's records.

#### 4. Active life reserves

Some policy forms utilize level premiums based on issue age. In these categories, active life reserves (also known as policy reserves or contract reserves) were developed from the actual reserve factors from the Company's valuation systems.

#### 5. Dividends

Although there have been only limited amounts of dividends paid on Individual Health policies, the actual dividend history was reflected using relationships from the Company's annual dividend resolutions, from annual statement (Schedule H) dividend amounts and from the annual policy experience exhibits. Some policy forms (such as hospital indemnity) have used benefit dividends instead of cash dividends. These benefit dividends were included in each year's claims and are reflected in the loss ratios used for those policies.

## 6. Net Investment Income and Capital Gains

Total company investment income and capital gains rates were used for the Individual Health business because it was considered an appropriate proxy for the rates used in the management of the business.

#### 7. Federal Income Taxes

Federal Income Tax rates were developed consistent with the general approach described in Section II.D.

## C. Prospective Calculations

The same kinds of assumptions used in the historical AC calculations were used in the prospective AC calculations, except that the prospective AC calculations also incorporated the anticipated average rate of lapse of the inforce business over its remaining future lifetime. Prospective assumptions were based on recent historical experience.

Future rate increases were anticipated for those categories of business for which the Company has been seeking rate increases as part of its financial management practices.

#### VI. INDIVIDUAL ANNUITY CONTRACTS

There are three main product categories in the Individual Annuity product line: Deferred Annuities, Retirement Annuities, and Payout Individual Annuities. Deferred Annuities include single-premium and flexible-premium annuities in deferred status. Retirement Annuities, which are no longer issued, are a fixed premium deferred annuity product. Payout Individual Annuities include single premium immediate annuities, structured settlements, settlement options in payout status, and Alliance contracts.

#### A. Deferred Annuities

#### 1. Overview and Methodology

This business includes both fixed and variable annuities issued both by Prudential and Pruco. The Prudential business has been issued since the early 1970s and the Pruco business has been issued since the early 1980s.

The general steps used to compute the AC for each deferred annuity policy were as follows:

- a. Capture historical financial information, as available and appropriate, for each deferred annuity policy.
- b. Determine the appropriate gain factors for each product, issue year and calendar year, based on historical financial experience.
- c. Multiply the historical gain factors by the applicable historical financial information and accumulate the results to the AC Date. This result is the historical AC for each policy.
- d. Multiply the account value on the AC Date by a factor that represents the present value of future contributions to surplus. This result is the prospective AC for each policy.
- e. Add the historical AC and prospective AC to produce the total AC for the policy, which, in no event, was allowed to be less than zero.

## 2. Historical Calculations

Gain factors were developed for each product for each calendar year since issue by analyzing the sources of gain and loss and relating them to appropriate bases such as account values and premiums paid. These factors reflected the pooling of experience in the year incurred. The gain factors were then applied to the policy-specific data (from the historical year-by-year transaction data files) for each year and accumulated with after-tax interest to the AC Date.

For periods where policy-specific data were not available, models were used to develop gain factors for these periods. These factors were applied to the earliest available policy-specific account values.

Gain factors used in the historical AC calculations were developed as described below.

## a. Investment gain

Investment gains in a calendar year were developed by applying investment spreads (as described below) to policy-specific account values.

Historical investment spreads for account values in the general account (and for Market-Value Adjusted annuities ("MVAs") in the separate account) were the excess of the actual historical investment returns over the average interest rate credited to contracts of the same plan type and calendar year of experience.

The general account investment returns were derived from the assets and investment income allocated to the individual annuity line of business separately for Prudential and Pruco, in line with historical financial management practices. Prudential general account investment returns were adjusted to reflect the amounts backing deferred annuity contracts.

For separate account business other than MVAs, the investment spread was the sum of contractual Mortality and Expense charges ("M&E charges"), administration fees, and net investment management fees.

#### b. Expense gain

The expense gain was the excess of product loads over the corresponding expenses.

To determine the product loads component, certain product loads were pooled by plan and calendar year, and others were captured on a policy-by-policy basis.

To determine the expense component, expenses and taxes other than Federal income taxes were allocated on a per policy, percent of account value, or percent of premium basis to reproduce actual amounts allocated to the individual annuity line of business for Prudential and Pruco combined. Expense allocations were consistent across all products. For commissions, writing and general agent commission scales were related to premiums, adjusting for vesting schedules where appropriate.

## c. Miscellaneous gains

Gains on miscellaneous benefits (e.g., return of premium or minimum guaranteed fund values for certain products) at the product level were expressed as a function of account values and applied to policy-specific account values.

#### d. Federal income taxes

Federal income taxes were reflected based on the general approach described in Section II.D. Since the historical transaction records did not contain the policy's tax reserves for each year, these were approximated based on an analysis of the Company's practices with respect to tax reserves.

#### e. DAC Proxy Taxes

The gain factors from DAC proxy taxes were calculated consistent with the general approach described in Section II.D. The gain factors varied by calendar year and reflected the amounts of tax-qualified business separately in Prudential and Pruco.

## 3. Prospective Calculations

For prospective ACs, a model was used to develop prospective AC factors based on present values of after-tax statutory gains expected for each product, by issue year. These factors were applied to the policy-specific account value on the AC Date.

In general, prospective gain factors were developed using approaches consistent with historical gain factors, and were based on recent experience.

#### a. Earned Rates and Credited Rates

Prospective earned rates for account values in the general account and for MVAs in the separate account were developed based on the general approach discussed in Section II.D. Prospective earned rates for other separate account business were developed based on an assumed asset portfolio and assumed returns for each asset group in the portfolio, for Prudential and Pruco combined.

Prospective investment spreads were developed from the recent spreads used in the historical calculation, and projected on the assumption that they will grade, over several years, into the long-term anticipated spread for the particular product.

The net interest rate credited to the policy was determined by subtracting the investment spreads from the prospective earned interest rates.

#### b. Premiums

These were projected as a percentage of fund values at the AC Date based on recent renewal premiums for each product as a percentage of projected fund values and reduced for future expected terminations as discussed below.

#### c. Gains from Terminations

Termination assumptions for surrenders, partial withdrawals, annuitizations, deaths and internal exchanges were projected based on recent experience. Factors for the gains varied by type of termination. An amount of gain on surrender was calculated based on the surrender charges that varied by plan. An amount of gain, expressed as a percentage of the assumed amount annuitizing, was calculated based on the assumptions and methods used for payout annuities. An amount of gain on exchanges was calculated based on anticipated gains on the Company's recent exchange program. The gains on deaths and partial withdrawals were assumed to equal zero.

#### d. Commissions

Assumptions for commissions were consistent with the scales used for the historical AC calculations.

## e. Years to Maturity

These were projected based on assumed average ages at maturity and the average issue age of the in force for each plan.

For the Canadian branch business, based on experience data of the Canadian branch (and assuming that the 1995 experience continued into the future after the business was sold to London Life), it was determined that the AC for each policy was negative. These values were not adjusted for the gain on sale, nor did these values impact on the gain on sale adjustment for other lines of business.

#### **B.** Retirement Annuities

Retirement annuities are fixed premium participating deferred annuities with guaranteed cash values that were issued from the 1930s until the early 1980s. While retirement annuities are individual annuity products, these contracts have many characteristics of traditional life insurance products. The historical ACs for retirement annuities were developed using the same methodology described for individual life Closed Block business. The assumptions used in the development of the historical ACs for retirement annuities were consistent with the assumptions described above for deferred annuities except that the investment experience of the individual life line of business (where retirement annuity premiums were invested) was used. For prospective ACs, the methodology and assumptions described for deferred annuities were used except that the prospective investment income assumption was developed consistent with the projected investment experience of the Closed Block.

For the Canadian branch business, assumptions as described in Section II.E.5 were used. The prospective ACs were adjusted consistent with the methodology described in Section II.E.4.

#### C. Supplementary Contracts, Annuities in Payout Status, and Alliance Contracts

The products included in this category include annuities in payout phase and the Alliance contract, which is a retained asset fund into which benefit proceeds have been deposited. The annuities in a payout phase include all deferred annuities that have annuitized, immediate annuities, structured settlements, and supplementary contracts issued under settlement options. Certain group life and group annuity supplementary contracts are also included.

The historical AC was calculated by applying gain factors to estimated statutory reserves and accumulating these values at an after-tax interest rate to the AC Date. For matured annuities (deferred annuities that have annuitized), credit was also given for contributions to surplus during the deferral period on a basis consistent with that developed for deferred annuities that have not yet annuitized.

The prospective AC was calculated by applying gain factors to projected future statutory reserves and discounting these values at an after-tax interest rate to the AC Date.

Gain factors were developed based on pricing assumptions, adjusted to reflect actual experience, where available.

For the Canadian branch business, comparable methods to those described above were used.

## VII. GROUP ANNUITY CONTRACTS

## A. Overview and Methodology

Prudential first began issuing group annuity business in 1928. Over time, the group annuity product offerings expanded to meet the needs of the marketplace. The main product groups in the Group Annuity product line used in the calculation of the ACs include: Group Annuity Segment business ("GAS"), Defined Contribution business ("DC"), Group Pension Segment A business ("GPSA"), Prupar business, Separate Account Investment Only business, Separate Account GIC business, and Synthetic GIC business.

While the experience assumptions underlying the different product groups are different, these product groups all used a similar methodology for calculating ACs. Product-specific differences are discussed in the sections below.

A case-by-case approach was used to determine the AC for each Group Annuity contract. The general steps were as follows:

- 1. Capture historical financial information, as available and appropriate, for each product component of a customer's contract.
- 2. Determine the appropriate gain factors for each calendar year, based on historical financial experience.
- 3. Multiply the historical gain factors by the applicable historical financial information, adjust the resulting gain for taxes, and accumulate to the AC Date as described in Section II.D. This result is the historical AC for each product component.
- 4. Multiply the prospective gain factors by projected annual fund balances (typically statutory reserves) for each product component, adjust the resulting gain for taxes and discount to the AC Date as described in Section II.D. This result is the prospective AC for each product component.
- 5. Add the historical AC and prospective AC to produce the total AC for each product component covered by the contract.
- 6. Combine the results across all product components for a contract, employing the combination rules that pertain to the financial practices for that contract, to arrive at the total AC for that contract. In no event will this total AC be allowed to be less than zero.

In the above general description, it is assumed that the group annuity contract is the financial management unit. However, in cases where there is more than one financial management unit within a group annuity contract or where two or more group annuity contracts constitute one

financial management unit, the above calculations are performed separately for each financial management unit.

For all products but DC, customer specific financial data was available for all contracts back to contract inception. For DC, certain customer specific financial data was not available prior to 1979. For these customers, customer account balances were extrapolated back to zero at the contract inception date using aggregate financial data.

#### **B.** Historical Calculations

The historical financial information to which gain factors were applied were a product component's fund balance (typically statutory reserves). The gain factors used for each product group are described below.

For GAS and DC contracts, the following gain factors were defined: risk charge factor (or interest charge), capital gains factor, expense gain factor, and surplus adjustment factor.

- 1. The risk charge is an annual charge that is made against contract values, typically assessed by reducing the interest rate to be credited to customer accounts. The annual risk charge amounts or factors for GAS and DC were available in the Company's records for years after 1967. For years prior to 1968, an annual factor which was level across policy years was used. This annual factor was calculated as the level annual factor, that, when applied to contract values for all contracts over the period from inception of the Group Annuity line of business through 1967, approximately reproduced the total risk charge revenue for the line of business according to the Company's records.
- 2. The capital gains factor represents capital gains on assets backing GAS and DC contracts when such gains were not distributed to the customer through credited rates, dividend formula, or experience rating process. These factors were derived separately for GAS and DC using a model of all business ever inforce and historical Company records of capital gains.
- 3. Expense gain factors were derived separately for GAS and DC in a model that compared allocated historical annual statement expenses to fees that were charged to cover expenses for each product for each calendar year. The allocation of annual statement expenses to product group was either directly available in Company records or derived from information in Company records. The expense gain (loss) factor was calculated as the excess (shortfall) of the charged fees over allocated expenses divided by mean aggregate fund balance for each product group.
- 4. The surplus adjustment factor reflects the surplus (or deficit) in the experience accumulation amounts that are not expected to be reflected in future dividends. These factors were derived by comparing detailed customer reserves to experience accumulation records as of the AC

Date. Experience accumulation records were available by contract for GAS contracts and by groups of similar contracts for DC contracts.

For GPSA contracts, one gain factor for each contract was defined – the adjusted pricing profit margin. The original pricing profit margin is the margin expected at the time of sale, and was available in the Company's records for each contract. These expected margins were adjusted using a model which trued-up initial historical AC's based on the expected margins to actual total adjusted surplus for all GPSA contracts as of the AC Date.

For contracts invested in the separate account(s), the following gain factors were defined: risk charge factor, expense gain factor, and investment management gain factor. For Prupar, Separate Account GIC, and Synthetic GIC business, all three factors were applicable. For Separate Account Investment Only business, only the investment management gain factor was applicable.

- 1. Risk charges or factors are contractually defined and were available in the Company's historical records. The risk charge factor or amount for each contract was adjusted for any increase in reserves for contract losses.
- 2. Expense gain/loss factors were developed by comparing expense revenues to expenses allocated to product groups. These factors were separately developed for each Prupar contract and for the combined experience of Separate Account GIC business and Synthetic GIC business.
- 3. Investment management gain factors were developed by asset class for separate account business, by comparing total investment management fee revenue to allocated investment and insurance expenses as available in the Company's records. These revenues and expenses were pooled over all separate account products. In certain years (1995-1999), the Company's experience data were aggregated for some of the asset classes, and an aggregated gain factor was calculated for the applicable asset classes for each such year. For years where data were not available (1982-1986 and 1988-1994), interpolation was used to develop gain factors. For 1987 and years prior to 1982, actual revenue and expense data by asset class were available for all six asset classes and were used to develop gain factors.

Historical gains were adjusted for taxes as described in Section II.D.

Historical gains were accumulated with interest to the AC Date as described in Section II.D.

#### C. Prospective Calculations

Gain factors were applied to the appropriate projected fund balances in determining the AC for each product component. If the product is one for which recurring premiums/deposits were being made, expected premium/deposits were included in the development of projected fund balances, based on recent historical contract-specific deposit amounts. Projections of fund balances reflect product-specific lapse assumptions, where appropriate, that are based on recent experience.

The gain factors used for each product group are described below.

For GAS, the following gain factors were defined for the future: risk charge factor, capital gains factor, and expense gain factor. Risk charges were assumed to continue into the future at the current level. Capital gains factors were developed to reflect the excess of any unamortized balance of past capital gains over that portion which is expected to be distributed to the customers through credited rates, dividends or experience rating. Expense gain factors were developed by grading from current factors to an ultimate factor over a three-year period. The ultimate factor was developed as the average of the historical factors for the years 1995 – 1999.

For DC, the following gain factors were defined for the future: risk charge factor, expense gain factor, and surplus adjustment factor. Risk charge factors were assumed to continue into the future at the current level. Expense gain factors were developed by grading from current factors to an ultimate factor over a three-year period. The ultimate factor was developed as the average of the historical factors for the years 1995 – 1999. Surplus adjustment factors were developed by grading from current factors to zero over a five-year period.

For GPSA contracts, a two-step approach was used. First, for each contract, the original pricing profit margin (the same value as used in the calculation of the historical AC) was applied to projected future statutory reserves and discounted to the AC Date. Second, the difference between present value of future surplus as calculated in the level interest scenario of the Company's 1999 Asset Adequacy Testing (adjusted appropriately for use in these calculations) and the sum of the results from the first step was allocated to each contract using present value of reserves as the basis.

For contracts invested in the separate account(s), the following gain factors were used: risk charge factor, expense gain factor, and investment management gain factor. For Prupar, Separate Account GIC, and Synthetic GIC business, all three factors were applicable. For Separate Account Investment Only business, only the investment management gain factor was applicable.

- 1. Risk charges were calculated by applying contractual formulas to projected account values.
- 2. Expense gain factors were developed by grading from current expense revenue vs. allocated product group expense levels to an ultimate level over a three-year period. The ultimate level was developed as the average of the historical factors for the years 1995 1999.
- 3. Investment management gain factors were developed by grading from current factors to the historic five-year average factors over a three year period.

Prospective gains were adjusted for taxes as described in Section II.D.

Prospective gains were discounted with interest as described in Section II.D.

For the Canadian branch business, based on experience data of the Canadian branch (and assuming that the 1995 experience continued into the future after the business was sold to

London Life), it was determined that the AC for each policy was negative These values were not adjusted for the gain on sale, nor did these values impact on the gain on sale adjustment for other lines of business.

## VIII. GROUP AND CREDITOR LIFE AND HEALTH INSURANCE POLICIES

## A. Overview and Methodology

The Company entered the group insurance marketplace in 1916 when it issued its first group life insurance policy. Creditor operations began in the 1920s and health insurance products (hospital, surgical, disability and major medical business) were first introduced in the 1940s. The group product portfolio has expanded to include managed care arrangements, dental insurance, group universal life, group variable universal life, long term care, and trust owned life insurance. The Company markets its products and services to employers of all sizes, with special programs for small employer groups, fully pooled prospectively rated business, retrospectively rated dividend-paying business, and administrative services only business.

In 1996, Prudential sold its Canadian administered group life and health business and, in 1999, the Company sold its US group healthcare operations.

A case-by-case approach was used to determine the AC for each Group Life and Health financial management unit. For purposes of this section, "group" includes "creditor." The general steps were as follows:

- 1. Capture historical financial information, as available and appropriate, for each coverage of a customer's policy.
- 2. Determine the appropriate gain factors for each calendar year, based on historical financial experience.
- 3. Multiply the historical gain factors by the applicable historical financial information and accumulate the results to the AC Date. This result is the historical AC for each coverage.
- 4. Multiply the current annualized premium for each coverage by a factor that represents the present value of future contributions to surplus. This result is the prospective AC for each coverage.
- 5. Add the historical AC and prospective AC to produce the total AC for the coverage.
- 6. Combine the results across all coverages for a financial management unit, employing the combination rules that pertain to the financial practices for those coverages, to arrive at the total AC for the financial management unit. In no event was this total AC allowed to be less than zero.

From 1985 to 1999, most historical financial information for each policy was available in electronic format. Prior to 1985, paper files from the Company's Group Life and Health Department were reviewed. For periods where policy-specific data were not available, estimated

values were developed, based on the available policy-specific data for other periods and rates of change in those data fields over time as derived from financial statements and other available experience information.

There were two distinct methodologies employed in developing the ACs for the Group Life and Health business, based on the financial arrangements that the policyholder had in place with Prudential. One method was used for "Standard Claimed" business (i.e., coverages where the rate is set in advance and there is no dividend determination or other retrospective recognition of the actual claims experience) and another method was used for "Actual Claimed" business (i.e., coverages or combinations thereof for which a dividend determination is made based on actual claims experience).

#### **B. Standard Claimed Business**

Consistent with the financial management practices for Standard Claimed business, each coverage under a policy was treated as a separate financial management unit. Therefore, ACs were developed independently for each coverage owned by a policyholder. The total AC for each coverage was set equal to sum of the historical AC and the prospective AC, but in no event was the total AC allowed to be less than zero.

Certain Standard Claimed policyholders also have advance premium policy funds on deposit with Prudential. These funds produced an additional AC based on the after-tax value of the interest spread earned by Prudential on these funds. Consistent with the historical financial management practice, the advance premium accounts are treated as a separate financial management unit.

The total AC for each policy owned by the policyholder equaled the sum of the total AC across all financial management units for that policy, including the AC associated with advance premium policy funds on deposit.

## 1. Historical Calculations

The historical AC for each coverage was computed by multiplying the coverage's premiums for each year since policy inception by gain factors and accumulating the result to the AC Date. The gain factors, or "Return on Premium" (ROP) factors represent the annual statutory gain or loss expressed as a percentage of premium for each product since its inception. The ROP factors were developed, for each product and calendar year, as the ratio of earned premiums plus investment income plus capital gains less incurred benefits less incurred expenses less incurred premium taxes, licenses, and fees, less federal income taxes, over earned premiums. These factors were derived to represent the experience of the Standard Claimed business only. Historical factors utilized annual statement results, internal Company workpapers and reporting systems that supported the annual statement, along with periodic experience studies that had been produced in the past.

#### 2. Prospective Calculations

The prospective AC for each coverage was computed by multiplying the coverage's current annualized premium by an ROP factor that represents the present value as of the AC Date of the expected future contributions to surplus. An initial ROP factor was computed based on the average ROP factor for the past three years; the future ROP factors were based on a blend of the initial factor and an ultimate ROP factor, with the factors grading to the ultimate ROP factor over the next three years. The ultimate future ROP factors were based on a combination of recent actual experience and Group Life and Health Management's forecasts of expected future profitability.

#### C. Actual Claimed Business

The total AC for each coverage within each financial management unit was set equal to the sum of the historical AC and prospective AC for that coverage. (The dividend case, which represents coverages or combinations of coverages for which a single dividend determination is made, most often represents the unit of financial management for Actual Claimed business.)

The total AC for each financial management unit was set equal to the sum of the total ACs of each coverage within the financial management unit, but in no event was the total AC for a financial management unit allowed to be less than zero.

The accumulation of AC amounts across years, coverages and dividend cases was dictated by a set of rules that define the uninterrupted period of time over which a single financial management unit existed. All coverages that were part of that financial management unit had their experience combined such that one coverage that produced a deficit during that period could have the deficit offset by a surplus on another coverage. Certain Actual Claimed policyholders also have policy funds on deposit with Prudential, such as advance premium accounts, dividend accumulation accounts, and claim stabilization reserves. These funds produced an additional AC based on the after-tax value of the interest spread earned by Prudential on these funds. Depending on the historical dividend calculation treatment of such funds, each such policy fund may either be treated as a separate financial management unit or as part of the same financial management unit as the coverages with which it is associated.

#### 1. Historical Calculations

The historical AC was computed since policy inception for each coverage within each dividend case a policyholder has in force. Components of the policyholder's financial experience (such as risk charges, expense charges, interest credited on policyholder reserves and funds, etc.) were multiplied by an AC factor for that component and the result was accumulated to the AC Date.

The results were then adjusted for a portion of any outstanding deficit on the coverage as of the AC Date and a portion of any reserve gain that arose on that date.

The components of the Actual Claimed historical AC factors are described below.

#### a. Risk Charge Gain or Loss

This element consisted of the contribution to surplus charge (CTS) plus the basic underwriting charge (BUC) less any persistency credit.

## b. Interest Spread Gain or Loss

This was defined as the excess of the interest earned on policyholder reserves and funds over the interest credited to the policyholder. The spread, expressed as a percentage of credited interest, was computed by comparing the annual earned investment income rate for the Group lines to the annual crediting rate for that particular liability or fund from the Company's group dividend formula. The annual earned investment income rates were developed as described in the general approach in Section II.D. These rates were modified, where appropriate, to remove the effects of corporate-wide reinsurance initiatives. Spread rates varied by year and by type of reserve or fund and were applied separately across each such item for each policyholder. Gains associated with funds invested in separate accounts (e.g., Trust Owned Life Insurance, Retiree Funding Accounts, and Survivor Income Benefits) were a function of the separate account asset base or investment management fees. These gains were computed separately for each affected group using the same methodology used for all separate account business and then added to the ACs for the affected group life and health policyholders.

#### c. Expense Gain or Loss

The excess of the expenses charged to a policyholder over the actual expenses incurred, expressed as a percentage of the expenses charged, represented an expense gain percentage. The Company conducted experience studies by coverage and by year comparing the total company expenses allocated to each coverage to the total amount of expenses charged in the dividend formula for expenses. Adjustments were made to reflect Standard Claimed business, and to remove the effect of non-eligible coverages (such as ASO business) and other unallocated expenses.

## d. Pooling Gain or Loss

The excess of the total pooling charges over all pooled claims for a coverage in a year, expressed as a percentage of the pooling charges, represented the pooling gain percentage. The pooling gain percentages were developed by comparing the total pooled claims for each coverage across all groups to the comparable pooling charges.

#### e. Conversion Gain or Loss

Whenever a terminating employee converts his or her life or health coverage to an individual policy, the Company makes a charge to the policyholder for the costs associated with that conversion. The Company's group department pays additional charges to the individual

department which administers these conversions to cover the costs of this business in excess of the premiums charged to the individuals. The excess of the amounts charged to all group policyholders for conversion charges over the total amount the Company's group department pays for the conversions to the individual departments, expressed as a percentage of the total conversion charges, represented the conversion gain percentage. The appropriate gain percentages were developed by comparing these values over several years.

#### f. Reserve Gain or Loss

Actual Claimed policyholders would have had their experience charged with reserves for their group based on assumptions from the Company's group dividend formula. In some cases, these reserves differ from the comparable reserves that the Company holds in its statutory statement. This difference as of the AC Date was reflected in the AC formula by determining the relationship between the total reserves for each type of reserve (e.g. unrevealed reserve, pending claim reserve, etc.) and for each coverage.

#### g. Charge for Outstanding Deficit

If a coverage was in a deficit position on the AC Date, a portion of that deficit was charged against the historical AC. This charge was made to reflect the possibility that the group may terminate its financial relationship with the Company while in a deficit position, thereby leaving the Company with a loss equal to that deficit. The portion of the deficit that was charged against the historical AC was based on a formula that reflected the length of time the group policyholder had been a Prudential group policyholder and the size of the deficit relative to the current annual premium. A formula was used to allocate some percentage of that deficit against the AC. The formula reduced the amount of deficit charged if a group had maintained a long-standing relationship with Prudential. It also charged a larger amount of the deficit if the deficit was large as a percentage of premium. This was based on the premise that a group with a very large deficit was more likely to terminate its relationship than a group with a small deficit that can be repaid out of premiums over the following few years.

Historical gains were adjusted for taxes as described in Section II.D.

Historical gains were accumulated with interest to the AC Date as described in Section II.D.

#### 2. Prospective Calculations

The prospective AC was computed by multiplying the current year's premium for each coverage by a gain factor that represents the present value as of the AC Date of the projected future after-tax contributions to surplus. Except as noted below, prospective assumptions were generally based on recent experience and the general approach described in Section II.D.

#### a. Premiums

Future premiums were projected using trend rates to reflect changes in rate levels and changes in amounts of coverage.

#### b. Lapse Rates

Lapse rates were developed based on the Company's experience and expectations to reflect the possible termination of each product within each actual claimed group.

#### c. ROPs

Averages of recent ROPs were computed separately for each actual claimed coverage for each policyholder. An ultimate ROP was developed based on the average ROP adjusted for projected future expense charges. The future ROP percentages for each year grade linearly from the historical average to the ultimate level over three years. For policyholders with products containing discretionary policyholder funds (such as insurance continuance funds or claim stabilization reserves), an additional ROP was computed based on these fund values and their recent contributions to surplus.

Prospective gains were adjusted for taxes as described in Section II.D.

Prospective gains were discounted with interest as described in Section II.D.

For the Canadian group life and health business composite life and health experience was used to develop historical ROP experience factors. The methodology for computing AC is as described for US standard claimed business in Section VIII.B and applies to both actual and standard claimed cases, with an additional adjustment made to actual claimed cases in a deficit position as of the AC Date. In addition, the prospective ACs were adjusted consistent with the treatment described for divested business in Section II.E.4.